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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/041,736      | 01/10/2002  | Kinya Ono            | Q68034              | 4032             |

7590 03/22/2005

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| EXAMINER |
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DALEY, CHRISTOPHER ANTHONY

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| ART UNIT | PAPER NUMBER |
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2111

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/041,736             | ONO ET AL.          |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Christopher A Daley    | 2111                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 1 – 20 are pending.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2,6,8-9,and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito (US6275889).

As to claims 1, 8, and 14 Saito discloses a data transmission/reception system, method, and apparatus comprising:  
a plurality of information transmitters connected to nodes on a bus, for  
transmitting/receiving data through a connection established between the nodes; (Saito

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teaches in figure 9 of a data/transmission/reception system comprising a plurality of information transmitters (80a – 80e) connected on a bus B10 that allows the transmitting and receiving of data, COL. 1, lines 59 – 67)

a connection establishing device for establishing a connection at each node; (Saito teaches of connection C10 that affords connection between the nodes, COL. 1 lines 64 – 67)

a connection status information holding device for holding connection status information indicating a managing status of bus resources while updating it during the execution of the connection establishment at each node; (Saito teaches of a status information holding device , the master plug register(MPR), and the plug control register (PCR) that contains the status of the nodes, COL. 2, lines 10 – 20) and the management and updating of information in figure 4)

a connection status information referring device for referring to the connection status information; (Saito teaches of connection status information device for referring to status information in figure 10. , COL. 2, lines 14 – 25)

and a processing executing device for executing predetermined processing to avoid unmanageable status of the bus resources when it is determined that the managing status of the bus resources is out of a permissible range. (Saito teaches of a processing device 102 in figure 12 that executes a predetermined process of switching two connection pairs between devices 100a – 100d, COL. 3, lines 38 – 48).

As to claims 2, 9, and 15, Saito discloses the data transmission/reception system, method and apparatus wherein a plurality of connection establishments are provided corresponding to types of the connections, and the connection status information holding device holds the connection status information for each connection establishment. (Saito teaches of a plurality of connection establishments such as oPCR of AV 80e into iPCR 80b, and also into iPCR 80d, with point-to-point, or broadcast connection types as illustrated in figure 9. Saito teaches of connection status information holding device iMPR, which comprises status information, COL1. lines 40 – 65).

As to claims 6,13, and 19, Saito discloses the data transmission/reception system, method and apparatus, wherein the bus is a serial bus compliant with IEEE 1394 Standard, and the plurality of connection establishments include establishment of a Broadcast-out connection, establishment of a Broadcast-in connection, and establishment of a Point-to-point connection. (Saito teaches of serial bus being IEEE 1394, and a plurality of connection establishment being Broadcast-out connection, establishment of a Broadcast-in connection, and establishment of a Point-to-point connection, COL. 1, lines 67, COL. 2, lines 38 – 42, figure 9).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5,10 - 12,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Ishida et al (US6839347) herein after referred to as Ishida.

As to claims 3,10, 16, Saito does not explicitly disclose the data transmission/reception system, method and apparatus, wherein the processing executing device generates bus resetting if a predetermined number or more of bits of the connection status information set in unknown statuses are present among connections to be established on the bus. (However, Ishida teaches of the control device of said system generating a bus reset command when power is applied, or nodes have been disconnected from the bus,thus COL. 6, lines 31 – 36. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the controller of Ishida in Saito as Ishida teaches of using said controller in various embodiment, and Saito would like to get explicit status information on all node to be aware of system functioning, COL. 22, lines 28 – 45).

As to claims 4,11, and 17, Saito does not explicitly disclose the data transmission/reception system, method and apparatus, wherein the managing status of the bus resources indicated by the connection status information includes, in addition

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to an unknown status, a valid status, an invalid status, and a status of processing being executed. (However Ishida teaches of connection status information comprising said status designations, COL. 2, lines 32 – 42. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the controller of Ishida in Saito as Ishida teaches of using said controller in various embodiment, and Saito would like to get explicit status information on all node to be aware of system functioning, COL. 22, lines 28 – 45).

As to claims 5,12, and 18, Saito discloses the data transmission/reception system, method and apparatus, wherein the connection establishments include processing for allocating a channel for interconnecting the nodes, and processing for allocating a bandwidth necessary for data transmission/reception, and Saito does not explicitly disclose the connection status information holding device updates the connection status information to an unknown status if a transaction in each processing results in a timeout or a data error. (However Ishida teaches of reflecting data error in a status field, COL. 3, lines 10 - 15. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the controller of Ishida in Saito as Ishida teaches of using said controller in various embodiment, and Saito would like to get explicit status information on all nodes to be aware of functioning system, COL. 22, lines 28 – 45).

As to claims 7 and 20, Saito does not explicitly disclose the data transmission/reception system, method and apparatus, wherein the plurality of

connection establishments includes restoration of the Broadcast-out connection, restoration of the Broadcast-in connection, and restoration of the Point-to-point connection in accordance with connection restoration carried out to restore the connection at each node before a passage of predetermined time after resetting of the connection established following the bus resetting. (However, Ishida teaches of restoration of said connections after a bus reset and all nodes are properly configured in a manner that allows for a functioning system, COL. 6, lines 34 - 39 . It would have been obvious to one of ordinary skill in the art at the time of the invention to use the controller of Ishida in Saito as Ishida teaches of using said controller in various embodiment, and Saito would like to get explicit status information on all node to be aware of system functioning, COL. 22, lines 28 – 45).



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571 272 3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CAD  
3/10/05



**TIM VO**  
**PRIMARY EXAMINER**